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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/787,396	02/26/2004	Bernard Simon	81091780	4518
28866 7590 07/10/2007 MACMILLAN, SOBANSKI & TODD, LLC ONE MARITIME PLAZA - FIFTH FLOOR 720 WATER STREET TOLEDO, OH 43604			EXAMINER KOEHLER, CHRISTOPHER M	
			ART UNIT 3726	PAPER NUMBER
			MAIL DATE 07/10/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary

Application No.

10/787,396

Applicant(s)

SIMON ET AL.

Examiner

Christopher M. Koehler

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,8,9 and 11-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,8,9 and 11-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1-6, 8, 9 and 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moore (US Patent No. 3,527,121) in view of Miller (US Patent No. 4,003,273).

Claim 1:

Moore teaches a method of producing a gearset, comprising the steps of producing a first member (24, 36) having a first surface (24), and a second surface (36) axially spaced from the first surface, forming a first set of four pairs of axially aligned, angularly spaced holes (44, 46) in the first surface and second surface, placing in each of the pairs of holes of the first set (44, 46), a short pinion shaft (58) having a short pinion (54) supported thereon, forming a second set four of axial, angularly spaced holes (42) in the first surface (24), placing a long pinion shaft (48) in each hole of the second set (42) and a long pinion (52) on each long pinion shaft, forming a second member (22) having a third set of four holes (40), each hole of the third set aligned with a hole of the second set (42), placing the second member (22) such that each long pinion shaft (48) fits in a hole of the second set (22) and securing the first (24, 36) and second members (22) mutually.

Moore does not explicitly teach engaging gear teeth on each long pinion with gear teeth on *two* short pinions located angularly between two long pinions.

Miller teaches engaging gear teeth on each long pinion (P2, figure 4) with gear teeth on two short pinions (P1) located angularly between each long pinion, wherein each short pinion is located at a first radial distance from the axis.

It would have been obvious to one of ordinary skill in the art at the time of invention to apply the gear arrangement of Miller to the gearset of Moore since Miller teaches that the gear arrangement of figure 4 provides an additional reduction ratio compared to the arrangement shown in figure 2 of Miller which has the same arrangement shown in Moore (col. 5, lines 66-68, Miller).

Claim 9:

Moore teaches a method for producing a gearset, comprising the steps of producing the first member (24) having a first set of four axial directed, angularly spaced holes (44), and a second set of four axially directed, angularly spaced holes (42), a third set of four axially directed, angularly spaced holes (46), each hole of the third set aligned with a hole of the first set (44) and spaced axially therefrom, and an axial pocket (see figure 2, outlines showing pockets) aligned with each hole of the second set (42), placing in the aligned holes of the first set (44) and third set (46), a short pinion shaft (58) having a short pinion (54) supported thereon, placing a long pinion shaft (48) in each hole of the second set (42), inserting axially through each pocket a long pinion (52) onto each long pinion shaft (48), forming a second member (22) having a fourth set of holes (40), each hole aligned with a hole of the second set (42), placing the second member (22) such that each long pinion shaft (48) fits in a hole of the fourth set (40), and securing the first (24, 36) and second members (22) mutually.

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Moore does not explicitly teach engaging gear teeth on a first long pinion with gear teeth on a first short pinion and a second short pinion, the first short pinion engaged with a second long pinion and the second short pinion engaged with a third long pinion.

Miller teaches engaging gear teeth on a first long pinion (P2) with gear teeth on a first short pinion (P1) and a second short pinion, the first short pinion engaged with a second long pinion and the second short pinion engaged with a third long pinion, each short pinion being located at a first radial distance from the axis (figure 4).

It would have been obvious to one of ordinary skill in the art at the time of invention to apply the gear arrangement of Miller to the gearset of Moore since Miller teaches that the gear arrangement of figure 4 provides an additional reduction ratio compared to the arrangement shown in figure 2 of Miller which has the same arrangement shown in Moore (col. 5, lines 66-68, Miller).

Claims 2-6, 8 and 11-16:

These steps are inherently provided for during the assembly of the gearset of Moore.

Response to Arguments

3. Applicant's arguments with respect to claims 1-6, 8-9 and 11-16 have been considered but are moot in view of the new ground(s) of rejection.
4. Applicant's arguments filed 5/1/07 have nevertheless been fully considered but they are not persuasive. Applicant argues that the eight pinion will not assemble in the annular space around the sun gears and that the method described in the present

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invention provides a technique absent from the prior art for designing an eight pinion gear set that is both able to be assembled and wherein each pinion is able to share torsional load with two other pinions and that the prior art teaches away from this configuration. The examiner respectfully disagrees that the prior art teaches away from this configuration because nowhere in the prior art is there a suggestion that such a configuration would pose a problem. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the "*technique*") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Koehler whose telephone number is (571) 272-3560. The examiner can normally be reached on Mon.-Fri. 7:30A-4:00P.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CMK



DAVID P. BRYANT
SUPERVISORY PATENT EXAMINER

6/29/07